Specification grade, wet listed 71 watt MR16 lamp adjustable fixture.
Adjustment mechanism features hot aiming capability, aiming marks and tooless locking. Optics provide glare-free $50^{\circ}$ cutoff to lamp and lamp image. For use with all halogen MR16 lamp varieties. Units small size is ideal for tight construction areas. Insulation must be kept 3" away from sides and top of fixture. Optical element can be changed after installation to provide a variety of distributions. e.g. into a Downlight


## SPECIFICATION FEATURES

## A…Reflector

.040 thick aluminum spun parabolic interior reflector in Clear, Gold, Haze, Warm Haze, Black Alzak ${ }^{\circledR}$ finish painted gloss white or matte white. Special cone colors listed below.

## B…Glass

.125 thick tempered clear glass protects lamp from direct spray of water and is retained during relamping.

## C...Flange

Self flange reflector or die-cast flange with either matte white or clear coat finish. Die-cast flanges are easily removed for field painting. Elements are keyed for proper insertion.

## D...Adjustability

Removable lamp adjustment mechanism provides up to $45^{\circ}$ tilt and $361^{\circ}$ rotation and locks into any aiming position. Unit is relamped without unlocking adjustments. Translating centerbeam optics maximize light output.

## E...Lens

Soft focus lens standard for smooth beam patterns. Up to two filter media can be used which are retained during relamping.

## F...Attachment

Positive torsion springs pull flange tight to ceiling. Mechanical light trap eliminates spill light at edge of flange or reflector.
G…Socket
GX5.3 base for Bi-pin MR16 lamps. Back light shield keeps interior of fixture dark.

## H…Transformer

Truvolt" toroidal transformer with dual-output taps for proper 12.0 V operation and quiet operation when dimmed. Dimmer tap compensates for inherent voltage loss from dimmers, resulting in $30 \%$ more lumens than traditional laminated transformers. Toroidal design, with $90 \%$ or greater efficiency, features a rolled one-piece continuous core of

M3 grade grain oriented silicon steel complete with an integral thermal to protect against overheating. For dimming, use dimmers rated for electromagnetic transformers. Transformer is warranted for 5 years and is serviceable from below ceiling. Note: If a dimming system is operated for construction lighting in its "shunt" mode, i.e. bypassing the dimmer modules, for an extended period of time, fixtures with the dual-tap toroidal transformer should be operated on the "Switched Fixture" output until the dimmers are in use. Operating fixtures on the "Dimmed Fixture" output with a full $120 v$ input for an extended period will overdrive the lamp and cause shortened lamp life.
I...Frame/Housing

Hot dipped galvanized 20 gauge steel frame with built in $1 / 2$ inch plaster lip. Gunsights allow for consistent alignment.
J...Junction Box

18 cubic inches, listed for 4\#12 AWG or 6\#14 AWG $90^{\circ} \mathrm{C}$ additional feed through conductors, has three $1 / 2^{\prime \prime}$ pryouts.
K…Bar Hangers
No Flex bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory push on clips. Nailess barb and locator lip provide consistent installation height.

## L...Codes

Thermally protected, IP labeled. Unit is airtight and exchanges less than 2.0 CFM with the plenum at a pressure of 75 pascals. Insulation must be kept three inches away from fixture sides and none on top as to entrap heat.
M…Labels
UL and cUL listed, standard wet label, IBEW union made


71 W MR16

3" ADJUSTABLE SHOWER


Ceiling Cutout:
$43 / 8^{\prime \prime}[112 \mathrm{~mm}]$

ENERGY DATA
120V Input

| Lamp <br> Watts | Input <br> Watts | Operating <br> Current |
| :---: | :---: | :---: |
| 20 | 23 | .19 |
| 35 | 41 | .34 |
| 37 | 42 | .35 |
| 42 | 47 | .39 |
| 50 | 57 | .48 |
| 65 | 70 | .58 |
| 71 | 77 | .64 |
| 75 | 81 | .68 |

ORDERING INFORMATION

## SAMPLE NUMBER: PN3MR-E3AASRC

Complete unit consists of a platform and element


| Lamp |  |  |  |  | ${ }^{\circ} \text { Aimir }$ zontal |  | gle | $\begin{gathered} 30^{\circ} \\ \hline \end{gathered}$ | Aimin |  |  |  |  |  |  |  | $45^{\circ}$ Aiming Angle Vertical Footcandles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OS 65MR160/0/NSP/10 |  |  |  | D | FC | L | w | D FC | L | w | CB | D | FC | L | w | CB | D | FC | L | w | CB |
|  |  |  |  |  | 618 | 0.7 | 0.7 | 4' 250 | 1 | 1 | 2.3 | 2' | 220 | 1.2 | 0.8 | 3.5 | 2' | 712 | 0.6 | 0.5 | 2.0 |
| Beam Spread: $10^{\circ}$ <br> CBCP: 14,000 |  |  |  |  | 202 | 1.1 | 1.1 | 7'82 | 1.7 | 1.8 | 4.0 | $3 '$ | 98 | 1.9 | 1.3 | 5.2 | 3' | 316 | 0.9 | 0.7 | 3.0 |
|  |  |  |  | 10' | 99 | 1.6 | 1.6 | 10' 40 | 2.4 | 2.5 | 5.8 | 4' | 55 | 2.5 | 1.7 | 6.9 | $4^{\prime}$ | 178 | 1.2 | 0.9 | 4.0 |
|  |  |  |  | 12' 6" | " 63 | 2 | 2 | 12' 6" 26 | 3 | 3.2 | 7.2 | 5 ' | 35 | 3.1 | 2.1 | 8.7 | 5 ' | 114 | 1.5 | 1.2 | 5.0 |
|  |  |  |  | Test \# H | H1269 |  |  | Test \# H21273 |  |  |  | Test \# | H21273 |  |  |  |  | \# H 2127 |  |  |  |
| OS 65MR160/40/FL | Degre | @ $180^{\circ}$ | $90^{\circ}$ | D | FC | L | w | D FC | L | W | CB | D | FC | L | w | CB | D | FC | L | w | CB |
|  | $85^{\circ}$ | 0 | 1869 | 4' | 130 | 2.3 | 2.3 | 4' 85 | 2.8 | 2.7 | 2.3 | $2 '$ | 104 | 2.1 | 1.9 | 3.5 | $2^{\prime}$ | 195 | 1.5 | 1.7 | 2.0 |
| $\begin{aligned} & \text { Beam Spread: } 40^{\circ} \\ & \text { CBCP: } 2,100 \end{aligned}$ | $75^{\circ}$ | 629 | 629 | $7{ }^{\prime}$ | 42 | 4 | 4 | 7' 28 | 5 | 4.7 | 4.0 | $3 '$ | 46 | 3.2 | 2.9 | 5.2 | 3' | 87 | 2.3 | 2.5 | 3.0 |
|  | $65^{\circ}$ | 385 | 385 | 10' | 21 | 5.8 | 5.8 | 10' 14 | 7.1 | 6.8 | 5.8 | 4' | 26 | 4.3 | 3.9 | 6.9 | $4{ }^{\prime}$ | 49 | 3.0 | 3.3 | 4.0 |
|  | $55^{\circ}$ | 852 | 568 | 12' 6" | " 13 | 7.2 | 7.2 | 12'6" 9 | 8.9 | 8.4 | 7.2 | 5 ' | 17 | 5.3 | 4.8 | 8.7 | 5 ' | 31 | 3.8 | 4.2 | 5.0 |
| Test \# H2126145 ${ }^{\circ}$ |  | 10367 | 2765 | est \# H21263 |  |  |  | Test \# H21264 |  |  |  | Test \# H21264 |  |  |  |  | Test \# H21265 |  |  |  |  |
| GE 050MR16C/NSP15 | Degree@ 180 ${ }^{\circ}$ @ 90 ${ }^{\circ}$ |  |  | D | FC | L | W | D FC | L | W | CB | D | FC | L | W | CB | D | FC | L | W | CB |
|  | $85^{\circ}$ | 0 | 1869 |  | 445 | 1 | 1 | 4' 291 | 1.2 | 1.2 | 2.3 | $2^{\prime}$ | 252 | 1.5 | 1.0 | 3.5 | $2^{\prime}$ | 639 | 0.8 | 0.7 | 2.0 |
| $\begin{aligned} & \text { Beam Spread: } 15^{\circ} \\ & \text { CBCP: } 9,500 \end{aligned}$ | $75^{\circ}$ | 629 | 629 | $7{ }^{\prime}$ | 145 | 1.8 | 1.8 | 7' 95 | 2.1 | 2.1 | 4.0 | $3^{\prime}$ | 112 | 2.2 | 1.5 | 5.2 | $3^{\prime}$ | 284 | 1.2 | 1.1 | 3.0 |
|  | $65^{\circ}$ | 385 | 385 | 10' | 71 | 2.5 | 2.5 | 10' 47 | 3 | 3 | 5.8 | $4^{\prime}$ | 63 | 2.9 | 1.9 | 6.9 | $4^{\prime}$ | 160 | 1.6 | 1.5 | 4.0 |
|  | $55^{\circ}$ | 568 | 284 | $12^{\prime} 6$ | " 46 | 3.1 | 3.1 | 12' 6" 30 | 3.7 | 3.7 | 7.2 | 5 ' | 40 | 3.7 | 2.4 | 8.7 | 5 ' | 102 | 2.1 | 1.8 | 5.0 |
| Test \# H21248450 |  | 3686 | 1382 | Test \# H21240 |  |  |  | Test \# H21243 |  |  |  | Test \# H21 243 |  |  |  |  | Test \# H21244 |  |  |  |  |
| GE 050MR16/C/NFL25 | Degree@ 180 ${ }^{\circ}$ @ 90 ${ }^{\circ}$ |  |  | FC |  | L | W | FC | L | W | CB | D ${ }^{\text {' }}$ | FC | L 4.5 | W | CB | D | FC |  | W | CB |
|  | $85^{\circ}$ | 0 | 1847 | 4' | F 74 | 1.6 | 1.6 | 4' 108 | 2 | 2.2 | 0 |  |  |  | 3.4 | 6.9 | $6^{\prime}$ | 28 | 3.9 | 3.8 | 8 |
| $\begin{aligned} & \text { Beam Spread: } 25^{\circ} \\ & \text { CBCP: } 3,000 \end{aligned}$ | $75^{\circ}$ | 622 | 622 | $7{ }^{\prime}$ | 57 | 2.9 | 2.9 | 7' 35 | 3.5 | 3.8 | 0 | 6 ' | 12 | 6.7 | 5.1 | 10.4 |  | 16 | 5.2 | 5.18 |  |
|  |  | 381 | 381 | 10' | 28 | 4.1 | 4.1 | 10' 17 | 5 | 5.4 | 0 | 10' |  | 11.2 | 8.5 | 17.3 | $10^{\prime}$ | 10 | 6.5 | 6.4 | 10 |
|  |  | 561 | 561 | 12' 6" 18 |  | 5.1 | 5.1 | 12' 6" 11 | 6.2 | 6.7 | 0 | 12' 31 |  | 13.4 | 10.220 .8 |  | $\begin{array}{lllll} \hline 12^{\prime} & 7 & 7.8 & 7.7 & 12 \\ \hline \end{array}$ |  |  |  |  |
| Test \# H211855450 40981366 |  |  |  | Test \# H21 187 |  |  |  | Test \# H1193 |  |  |  | Test \# H21 193 |  |  |  |  | Test \# H21185 |  |  |  |  |
| GE 050MR16/C/FL40 | Degree@ 180 ${ }^{\circ}$ @ 90 ${ }^{\circ}$ |  |  | FC |  | C |  | D FC | L | w | CB | $2^{\prime}$ |  | $\begin{gathered} \hline \mathrm{L} \\ \hline 1.8 \\ \hline \end{gathered}$ | W CB |  | D ${ }^{\prime}$ | FC |  | w | CB |
|  | $85^{\circ}$ | 0 | 0 |  | 129 | 2.0 | 2.0 | 4' 66 | 2.8 | 2.8 | 2.3 |  |  |  | 1.7 | 3.5 |  | 1591.5 |  | 1.6 |  |
| $\begin{aligned} & \text { Beam Spread: } 40^{\circ} \\ & \text { CBCP: } 1,700 \end{aligned}$ |  | 0 | 0 | $7{ }^{\prime}$ | 42 | 3.4 | 3.4 | 7' 22 | 5.0 | 4.8 | 4.0 | $3 '$ | 45 | 2.7 | 2.5 | 5.2 | $3 '$ | 71 | 2.3 | 2.4 |  |
|  |  | 0 | 0 | 10' | 21 | 4.9 | 4.9 | 10' 11 | 7.1 | 6.9 | 5.8 | 4' | 25 | 3.6 | 3.3 | 6.9 | $4^{\prime}$ | 40 | 3 | 3.2 | 3 |
|  |  | 0 | 0 | 12'6" | 13 | 6.1 | 6.1 | 12'6" | 8.9 | 8.6 | 7.2 | 5 ' | 16 | 4.5 | 4.1 | 8.7 | 5 ' | 25 | 3.8 | 4 | 5 |
| Test \# H21204450 |  | 0 | 1997 | Test \# H21 249 |  |  |  | Test \# H21 199 |  |  |  | Test \# H21 202 |  |  |  |  | Test \# H21203 |  |  |  |  |
| PH 045MR16C/RC/SP8 | Degree@ 180 ${ }^{\circ}$ @ $90^{\circ}$ |  |  | FC |  |  |  | D FC | L | W | CB | D | FC | L | W | CB | D | $\begin{aligned} & \mathrm{FC} \\ & 722 \\ & \hline \end{aligned}$ | L | $\begin{gathered} \text { w } \\ \hline 0.7 \\ \hline \end{gathered}$ | CB |
|  | $85^{\circ}$ | 0 | 821 | 7' 227 |  | 0.6 | 0.8 | 4' 342 | 1 | 0.9 | 2.3 |  |  | 1.3 | 0.8 | 3.5 |  |  |  |  |  |
| $\begin{aligned} & \text { Beam Spread: } 8^{\circ} \\ & \text { CBCP: } 16,000 \end{aligned}$ | $75^{\circ}$$\frac{65^{\circ}}{}$$\frac{55^{\circ}}{45^{\circ}}$ | 0 | 277 |  |  | 1.1 | 1.4 | 7' 112 | 1.8 | 1.7 | 4.0 | 3' 133 |  | 2.0 | 1.2 | 5.2 | 3 | 321 | 1.0 | $1.0 \quad 3.0$ |  |
|  |  | 0 | 169 | 10' | 111 | 1.6 | 2 | 10' 55 | 2.5 | 2.4 | 5.8 | 4' | 75 | 2.6 | 1.5 | 6.9 | $4^{\prime}$ | 181 | 1.3 | 1.3 | 3.0 |
|  |  | 125 | 250 | 12'6" | 71 | 2 | 2.5 | $13^{\prime} 32$ | 3.3 | 3.1 | 7.2 | 5' | 48 | 3.3 | 1.9 | 8.7 | 5 ' | 116 | 1.7 | 1.6 |  |
| Test \# H22402 45 |  | 1316 | 2024 | Test \# H21223 |  |  |  | Test \# H21227 |  |  |  | Test \# H21227 |  |  |  |  | Test \# H21228 |  |  |  |  |
| GE 042MR16C/VNSP | Degree@ 180 ${ }^{\circ}$ @ $90^{\circ}$ |  |  | D FC <br> 4 498 |  | L | w | D FC | L | w |  | D FC |  | L | w | CB | D | FC | L | W CB |  |
|  | $85^{\circ}$ | 1849 | 1849 |  |  | 0.5 | 0.8 | 4' 284 <br> 7 <br> 1 | 0.8 | 0.8 | 2.3 | 2' 261 |  | 1.0 | 0.7 | 3.5 | 2' | 571 | 0.5 | $0.6 \quad 2.0$ |  |
| $\begin{aligned} & \text { Beam Spread: } 9^{\circ} \\ & \text { CBCP: } 12,500 \end{aligned}$ |  | 623 | 623 | 7 163 <br> $10^{\prime} \quad 80$  <br> 12  |  | 0.9 | 1.4 |  | 1.4 | 1.4 | 4.0 | $3^{\prime}$ | 116 | 1.5 | 1.0 | 5.2 | $3 '$ | 254 | 0.7 | 1.0 | 3.0 |
|  |  | 381 | 381 |  |  | 1.2 | 2 | $10^{\prime} \quad 45$ <br> $12^{\prime} 629$ | 2.1 | 2.5 | 5.8 | $4^{\prime}$ | 65 | 2.0 | 1.4 | 6.9 | $4^{\prime}$ | 143 | 0.9 | 1.3 | 4.0 |
|  |  | 281 | 0 | 12' 6" 51 |  | 1.6 | 2.5 |  |  |  | 7.2 | 5 ' | 42 | 2.5 | 1.7 | 8.7 | $5{ }^{\text {' }}$ | 91 | 1.2 | 1.6 | 5.0 |
| Test \# H21210 |  | 3190 | 2279 | Test \# H | H21212 |  |  | Test \# H21211 |  |  |  | Test \# | H2121 |  |  |  |  | H21 |  |  |  |
| OS 037MR16/R/SP10 | Degree | @ $180^{\circ}$ | @ 90 ${ }^{\circ}$ | D | FC | L | w | D FC | L | w | CB | D | FC | L | w | CB | D | FC | L | w | CB |
|  | $85^{\circ}$ | 0 | 0 | 4' | 681 | 0.6 | 0.8 | 4' 356 | 1 | 0.9 | 2.3 | 2' | 303 | 1.3 | 0.7 | 3.5 | $2^{\prime}$ | 909 | 0.7 | 0.5 | 2.0 |
|  | $75^{\circ}$ | 0 | 0 | $7{ }^{7}$ | 222 | 1.1 | 1.4 | 7' 116 | 1.7 | 1.5 | 4.0 | $3 '$ | 135 | 2.0 | 1.1 | 5.2 | $3 '$ | 404 | 1.0 | 0.7 | 3.0 |
|  | $65^{\circ}$ | 0 | 0 | 10' | 109 | 1.6 | 2 | 10' 57 | 2.5 | 2.1 | 5.8 | $4{ }^{\prime}$ | 76 | 2.6 | 1.4 | 6.9 | $4^{\prime}$ | 227 | 1.3 | 1.0 | 4.0 |
| CBCP: 13,100 55 | $55^{\circ}$ | 284 | 284 | 12'6" | 70 | 1.9 | 2.5 | 12'6" 36 | 3.1 | 2.7 | 7.2 | 5' | 48 | 3.3 | 1.8 | 8.7 | 5 ' | 145 | 1.6 | 1.2 | 5.0 |
| Test \# H21250 4 | $45^{\circ}$ | 3225 | 2304 | est \# H | H21253 |  |  | Test \# H21254 |  |  |  | Test \# | H21254 |  |  |  |  | \# H 2125 |  |  |  |
| GE 020MR16CNNSP7 | Degree | @ $180^{\circ}$ | @ 90 ${ }^{\circ}$ | D | FC | L | W | D FC | L | w | CB | D | FC | L | w | CB | D | FC | L | w | CB |
|  | $85^{\circ}$ | 0 | 0 | $4{ }^{\prime}$ | 312 | 0.5 | 0.5 | 4' 153 | 0.8 | 0.5 | 2.3 | $2 '$ | 150 | 0.9 | 0.5 | 3.5 | $2^{\prime}$ | 482 | 0.4 | 0.3 | 2.0 |
|  | $75^{\circ}$ | 0 | 0 |  | 102 | 0.8 | 0.8 | 7' 50 | 1.4 | 0.9 | 4.0 | $3^{\prime}$ | 67 | 1.3 | 0.8 | 5.2 | $3^{\prime}$ | 214 | 0.6 | 0.5 | 3.0 |
|  | $65^{\circ}$ | 0 | 0 | 10' | 50 | 1.2 | 1.2 | 10' 24 | 2.1 | 1.3 | 5.8 | 4' | 38 | 1.7 | 1.0 | 6.9 | $4^{\prime}$ | 120 | 0.8 | 0.6 | 4.0 |
| CBCP. 7,400 5 ${ }^{\circ}$ | $55^{\circ}$ | , |  | 12' 6' | " 32 | 1.5 | 1.5 | 12' 6"16 | 2.6 | 1.7 | 7.2 | $5{ }^{\prime}$ | 24 | 2.1 | 1.3 | 8.7 | $5{ }^{\text {' }}$ | 77 | 1.0 | 0.8 | 5.0 |
| Test \# H21237 4 | $45^{\circ}$ | 1152 | 1382 | Test \# H | 21232 |  |  | Test \# H21 234 |  |  |  | Tes | 123 |  |  |  |  | \# H 2123 |  |  |  |

## Notes and Definitions:

Luminance: To convert $\mathrm{cd} / \mathrm{m}^{2}$ to footlamberts, multiply by 0.2919

- Data is based upon bare lamps photometrics.
- Beam spread is to $50 \%$ center beam candlepower (CBCP.)

D = Distance to floor or wall
$\mathrm{FC}=$ Footcandles on floor or wall at center beam aiming location.
$\mathrm{L}=$ Effective Visual Beam length in feet ( $50 \%$ of maximum footcandle level.) W = Effective Visual Beam width in feet ( $50 \%$ of maximum footcandle level.) $C B=$ Distance across or down to center beam location..


